



CHARACTERISATION OF GENE  
FUNCTION USING DOUBLE STRANDED

RNA INHIBITION

by Plaetinck et al.

Serial No. 10/057,108

Docket No. D00590.70011.US

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FIG. 1.

pGN1

gagtgcacccatattgcggtgtgaaataccgcacagatgcgtaaggagaaaataccgcatcaggcgaaattgtaaacgttaatttt  
tgtaaaaattcgcgtaataattttgttaaatcagctcatttttaaccaataggccgaaatcggcaaaatcccttataaatcaaaagaat  
agaccgagataggggttgagtgtgttcaggtttggaacaagagtcactattaaagaacgtggactccaacgtcaaaggcgaa  
aaaccgtctatcaggggcgatggcccactacgtgaaccatcacccaaatcaagtttttgcggtcgaggtgccgtaagctctaat  
cggaaccctaaaggagagccccgatattagagcttgacggggaaagccggcgaaacgtggcgagaaagggaagggaagaaag  
cgaaaggagcgggcgctaggggcgctggcaaggttagcggtcacgctgcgtaaccaccacaccccgccgcttaattgcgc  
cgctacagggcgctccattcgccattcaggctgcgcaactgttgggaaggcgatcggtgcgggctcttcgctattacgcca  
gctggcgaaagggggatgtgctgcaaggcgattaagttgggtaacgccagggtttccagtcacgacgttgtaaacgacgg  
ccagtgaaattgaatacgaactactataggcggaattcgagctcggtaccggggatcctctagagtcgaaagcttctgcacctat  
agtgcgtgattacagcttgagtattctatagtgacctaataagcttgccgtaatacatggtcatagctgttctgtgtgaaattgtt  
atccgctcacaaattccacacaacatacagagccggaagcataaagtgtaagcctggggtgcctaatagtgagctaaactcacatt  
aattgcgttgcgctcactgcccgtttccagtcgggaacacgtgctgccagctgcattaatgaatcgcccaacgcgcggggag  
aggcggtttgcgtattggcgctcttcgcttcctcgtcactgactcgtgcgctcggtcgttcggctcgggcgagcggtatcag  
ctcactcaaaggcggttaatacgggtatccacagaatcagggggataacgcaggaaagaacatgtgagcaaaaggccagcaaaa  
ggccaggaaccgtaaaaaggccgctgtgctggcgttttcgataaggctccgccccctgacgagcatcacaaaaatcgacgct  
caagtcagaggtggcgaaacccgacaggactataagataaccaggcggttccccctggaagctccctcgtgcgctctcctgttc  
cgacctgcccgttacgggatacctgtccgctttctcccttcgggaagcgtggcgcttctcatagctcacgctgtaggtatctca  
gttcggtgtaggtcgttcgctccaagctgggctgtgtgcacgaacccccgttcagcccgaccgctgcgcttatccggtacta  
tcgtcttgagtccaacccggaagacagacttatcgccactggcagcagccactggtaacaggattagcagagcgaggtatgt  
aggcggtgctacagagttctgaagtgggtggcctaactacggctacactagaaggacagtatttggtatctgcgctctgctgaagc  
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agattacgcgcagaaaaaaaggatctcaagaagatccttgatctttctacggggtctgacgctcagtggaacgaaaactcacgt  
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gactccccgctgtagataactacgatacgggaggggcttaccatctggccccagtgctgcaatgataccgcgagaccacgct



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caccggctccagatttatcagcaataaaccagccagccggaaggccgagcgcagaagtggctcctgcaactttatccgctcc  
atccagctctattaattgttgccgggaagctagagtaagtagttcgccagttaatagtttgcgcaacgttggtggcattgctacaggca  
tcgtggtgtcacgctcgtcgttggtatggcttcattcagctccggttcccaacgatcaaggcgagttacatgatcccccattgtgtg  
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cgttcttcggggcgaaaactctcaaggatcttaccgctgttgagatccagttcgatgtaaccactcgtgcacccaactgatctca  
gcattctttacttaccagcgttctgggtgagcaaaaaacggaaggcaaatgccgcaaaaaagggaataaggcgacacg  
gaaatgtgaatactcatactcttctttcaatattatgaagcatttatcagggttattgtctcatgagcggatacatattgaatgat  
ttagaaaaataaacaataagggttccgcgacatttccccgaaaagtgccacctgacgtctaagaaaccattattatcatgacatt  
aacctataaaaataggcgtatcacgaggcccttctgtctcgcggttcggtgatgacggtgaaaacctctgacacatgcagctcc  
cggagacggtcacagcttctgtgaagcggatccgggagcagacaagcccgtcaggggcgctcagcgggtgttgccgggt  
gtcggggctggcttaactatcgggcatcagagcagattgtactga

FIG. 2.

PGN100

ctagcatgaacacgattaacatcgctaagaacgacttctctgacatcgaactggctgctatcccggtcaacactctggctgaccatt  
acggtgagcgttttagctcgcgaacagttggcccttgagcatagctcttacgagatgggtgaagcacgctccgcaagatgttga  
gcgtcaacttaaaagctggtgaggttgcggataacgctgcgccaagcctctcatcactaccctactccctaagatgattgcacgc  
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agccgtagcgtacatcaccattaagaccactctggcttgcttaaccagtgctgacaatacaaccgttcaggctgtagcaagcgca  
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caactcaacaagcgcgttagggcacgtctacaagaaagcattatgcaagttgtcaggtgacatgctcttaagggtctactcg  
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aatgggttagcttacaccgccaaaatgctggcgtagtaggtcaagactctgagactatcgaactcgacactgaatacgtgaggct  
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tggtggtggctattgggctaaccgctcgtcgtcctctggcgctggtgcgtactcacagtaagaaagcactgatgcgtacgaagac  
gtttacatgcctgaggtgtacaaagcgattaacattgctgcaaaacaccgcatggaatacaagaagtcctagcggctgcc  
aacgtaatcaccaagtgaagcattgtccggtcagggacatccctgcgattgagcgtgaagaactcccgatgaaccgggaaga  
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gcggtcgtgttacgcccgtgcaatgttcaaccgcgaaggtaacgatatgaccaaaggactgcttacgctggcgaaaggttaac  
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caagttcattgaggaaaaccacgagaacatcatggcttgcgctaagtctccactggagaacacttgggtgggtgagcaagattct  
ccgttctgcttccctgcttctgcttgagtacgctgggttacagcaccacggcctgagctataactgctcccttcgctggcgttg  
acgggtcttgcctggtacccagcacttctccgcgatgctccgagatgaggtaggtggctgcgcggttaactgcttctagttag  
accgttcaggacatctacgggattgttgctaagaaagtcaacgagattctacaagcagacgcaatcaatgggaccgataacgaa  
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aagctgatttgggaatctgtgagcgtgacgggtgtagctgcggttgaagcaatgaactggcttaagtctgctgtaagctgctgg



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FIG. 2 (CONTINUED 1)

ctgctgaggtcaaagataagaagactggagagattcttcgcaagcggtgcgctgtgcattgggtaactcctgatggttccctgtgt  
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aaagatagcagagattgatgcacacaaacaggagctcgtgtatcgctcctaactttgtacacagccaagacggttagccaccttcgta  
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cggagcctatggaaaaacgccagcaacgcggccttttacggttctggcctttgtcggcctttgtcacatgttcttctgcgt  
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cacgacaggtttccgactggaaagcgggcagtgagcgcgaacgaattaatgtgagtttagctcactcattaggcaccacaggct  
ttacatttatgcttccgctcgtatgtgtgtggaattgtgagcggataacaatttcacacaggaaacagctatgacctgattacg  
ccaagcttgcatgctcaggtcgactctagaggatcaagagcattgaatcagaatatggagaacggagcatgagcatttcga  
agtttttagatgcactagaacaaagcgtgttggttcctctgagcccccttcttatataccgcattctgcagccttacagaatgtt



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*FIG. 2. (CONTINUED 2)*

ctagaaggctctagatgcattcgttgaaaatactcccggtgggtgcaaagagacgcagacggaaaatgtatctgggtctctttatt  
gtgtacactacttttccatgtaccgaatgtgagtcgccctcctttgcaacaagcagctcgaatgttctagaaaaagggtggaaaata  
gtataaataccggtgaaaataaataccgaacaacatttgctctaattgtgaaattagaaatcttcaactataatcatctcactggatc  
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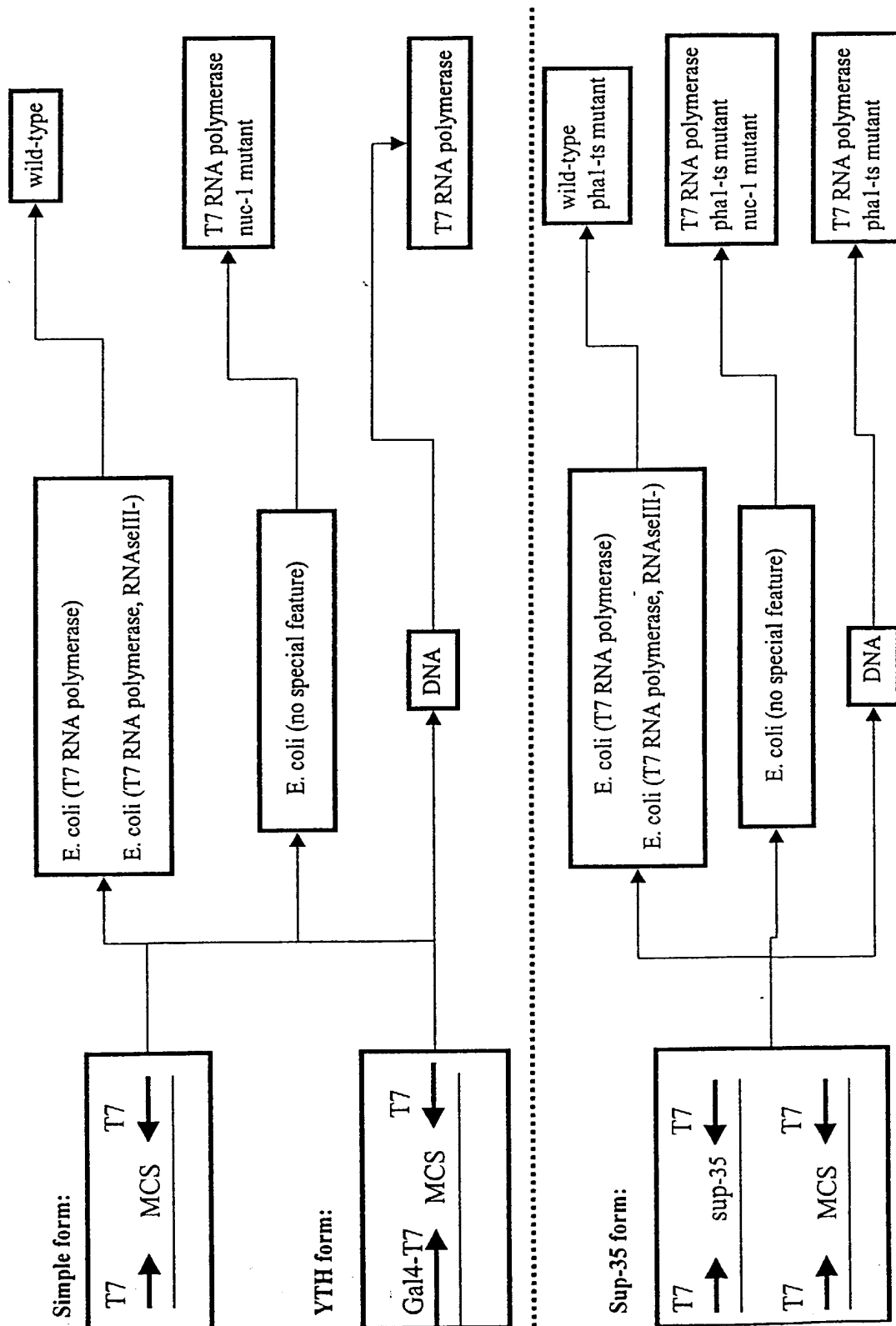
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FIG. 3.

C. ELEGANS STRAIN

BACTERIAL STRAIN  
(only important phenotypes)

VECTOR:  
(only important features)





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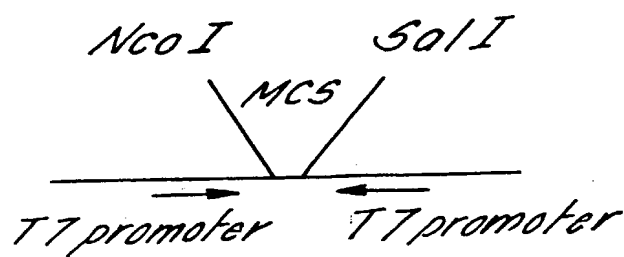
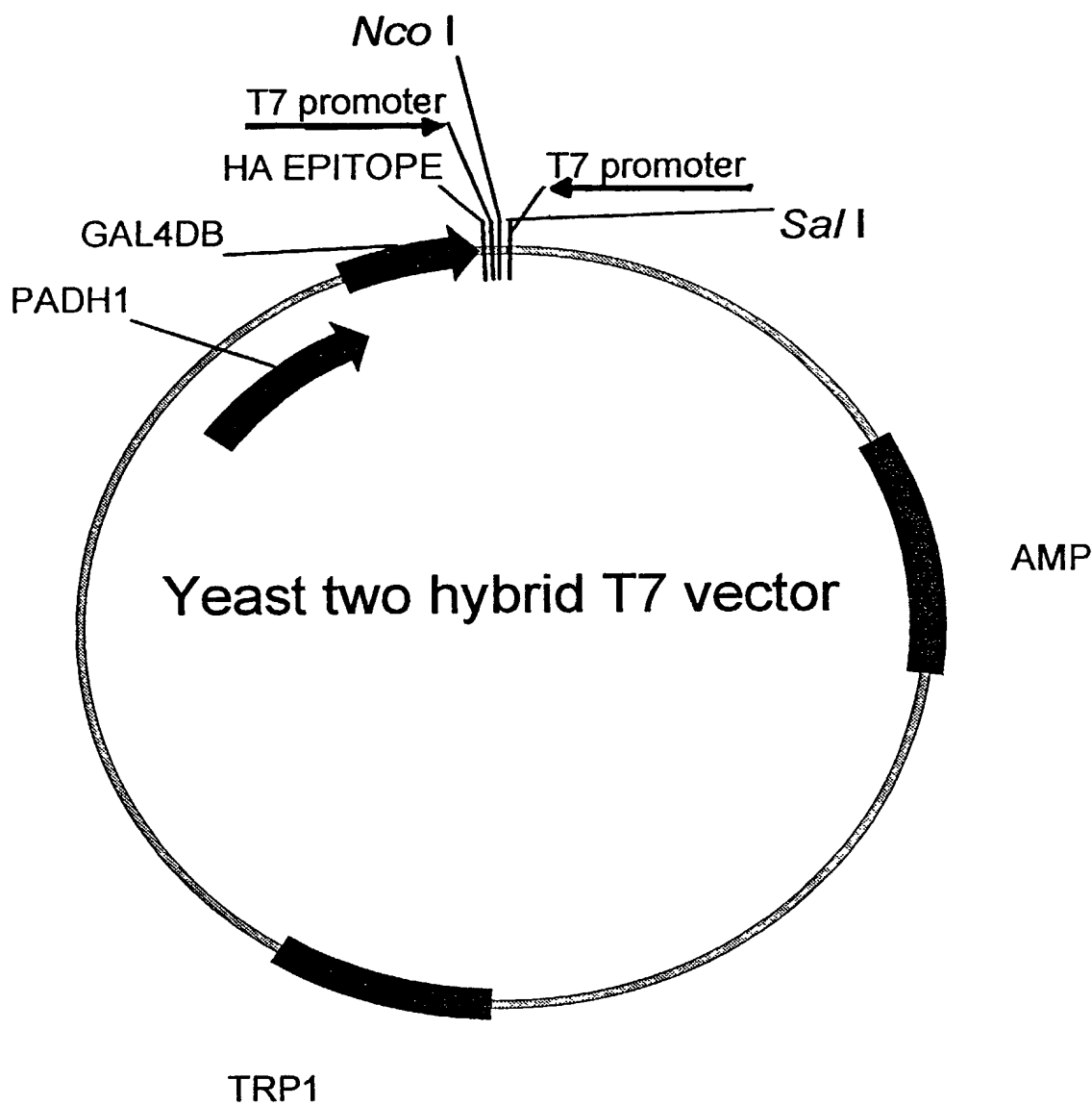
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FIG. 4.

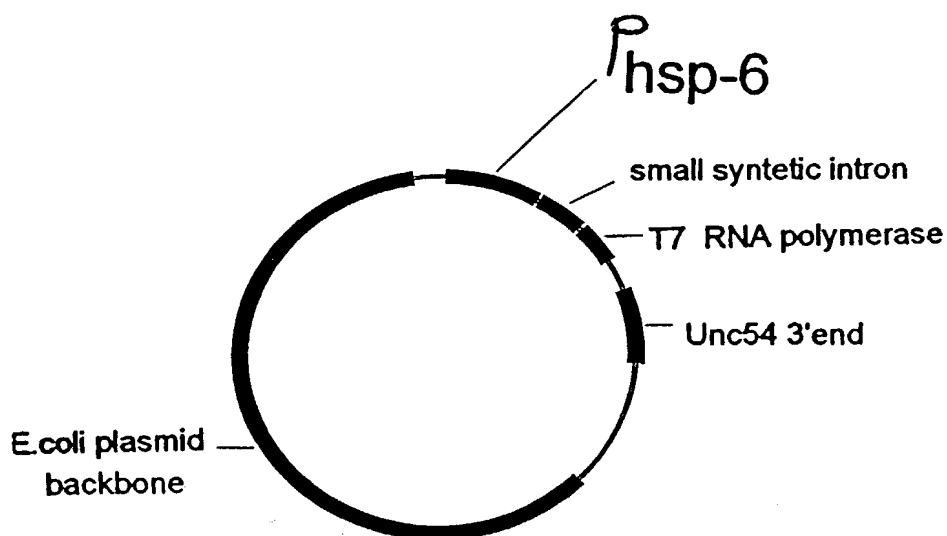
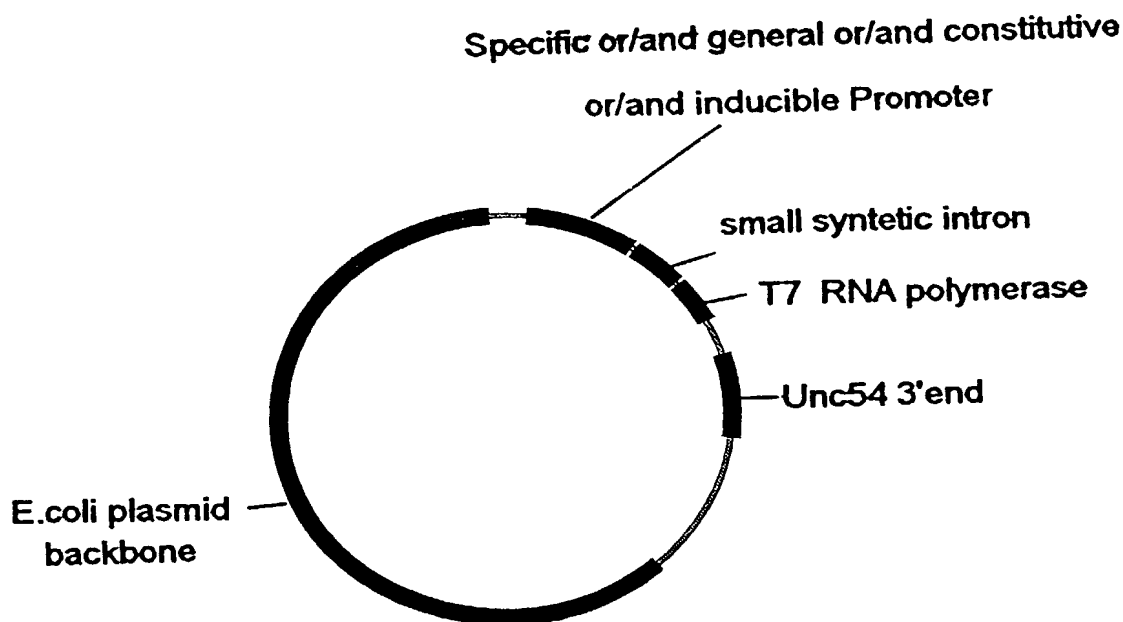




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FIG. 5.

# General description of the C.elegans T7 RNA polymerase expression vector with 4 examples





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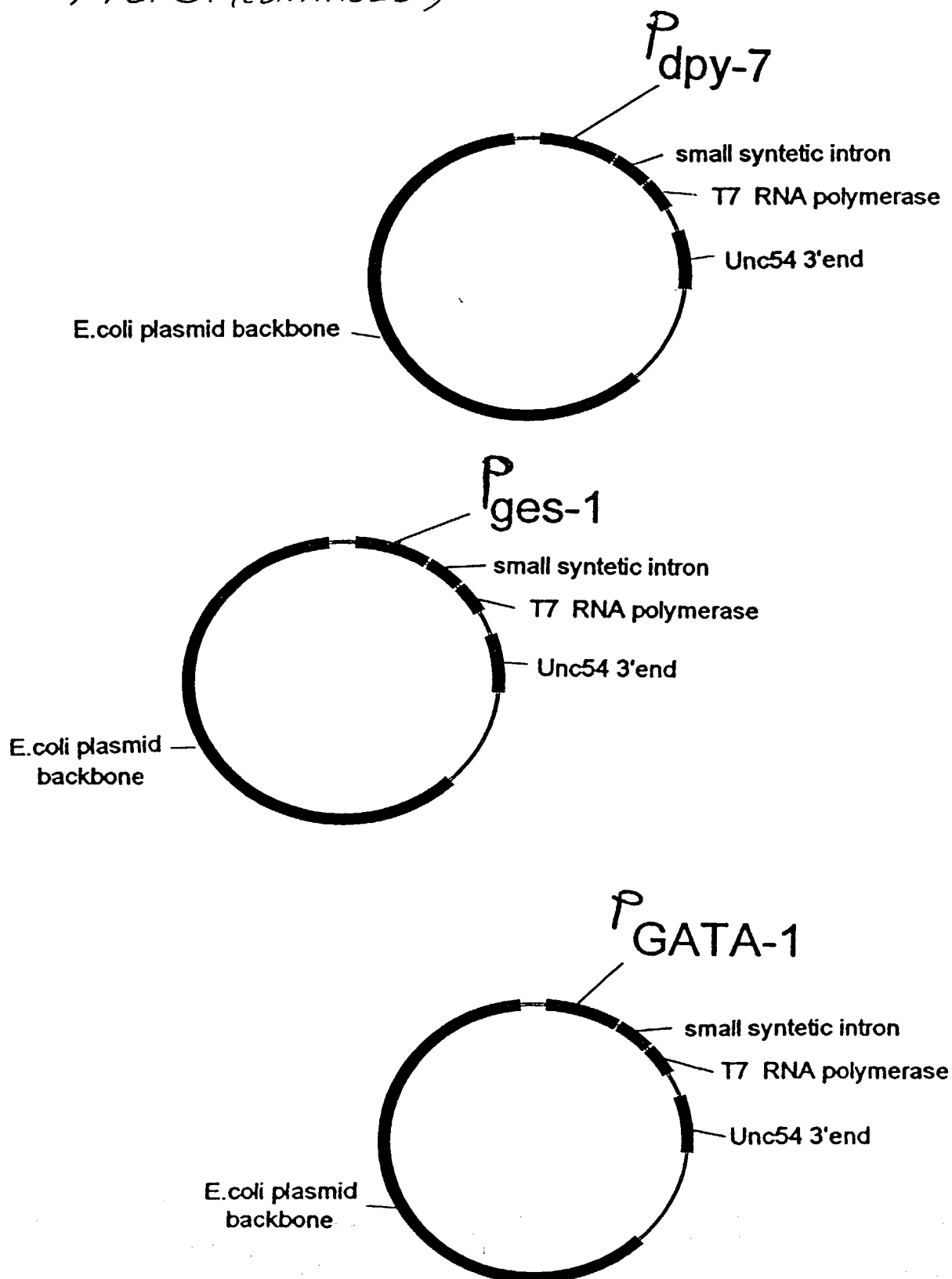
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FIG. 5. (CONTINUED)



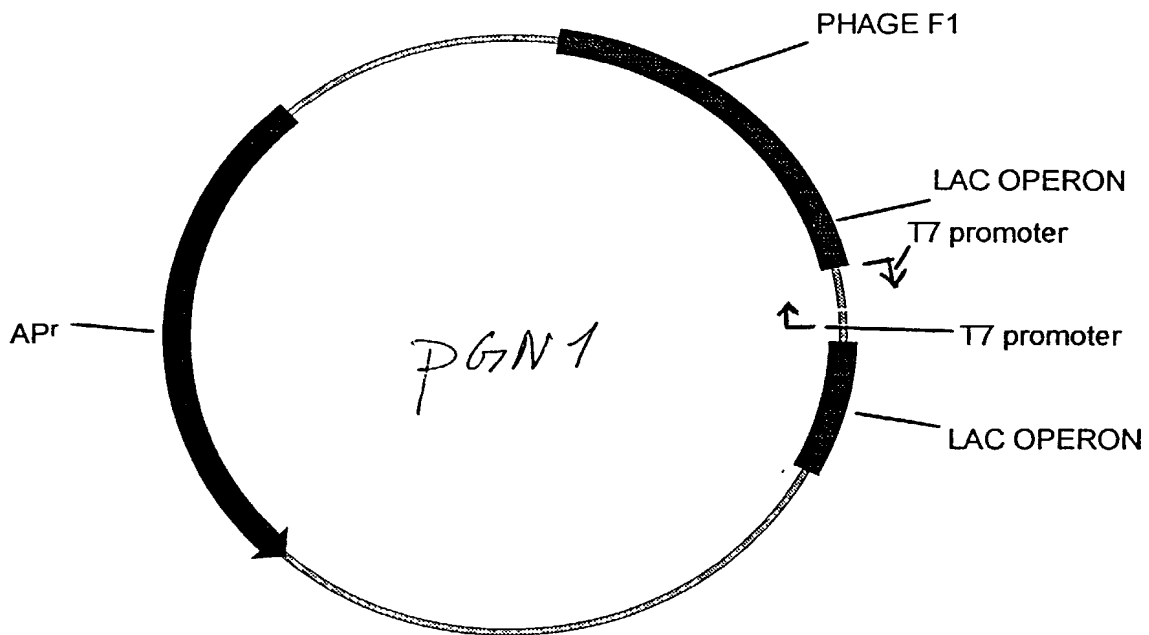




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FIG. 6.



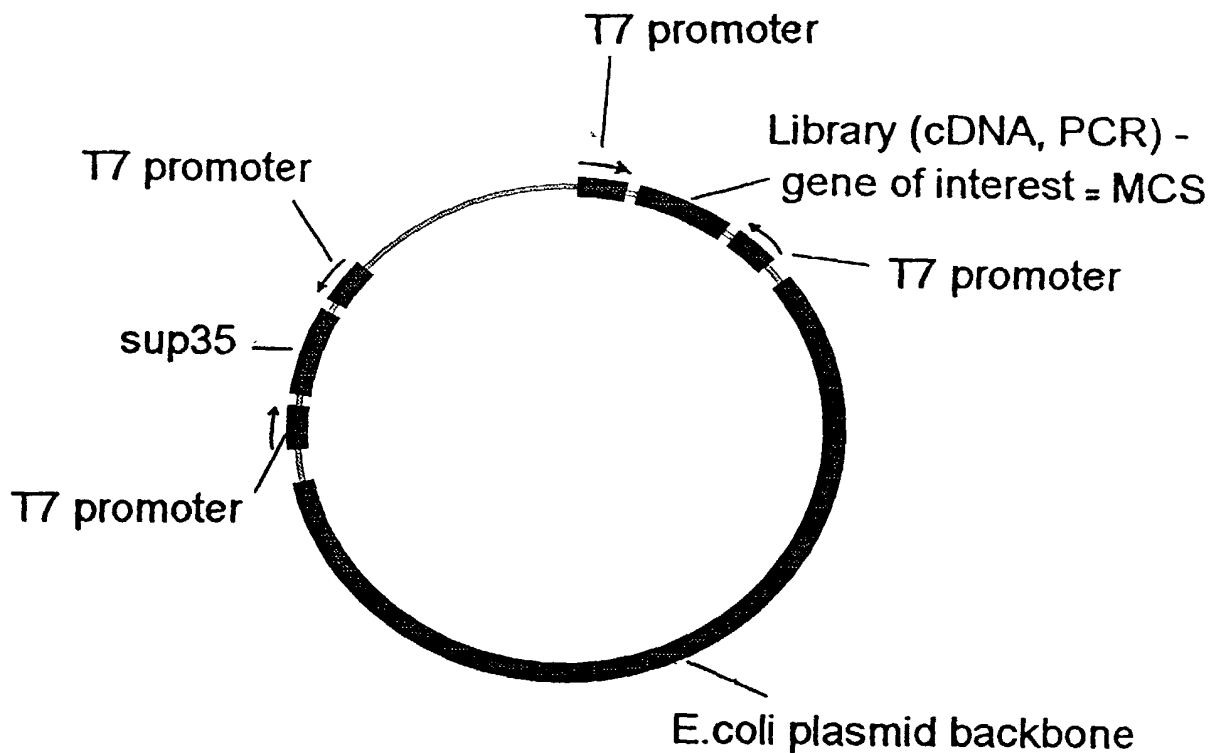


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FIG. 7



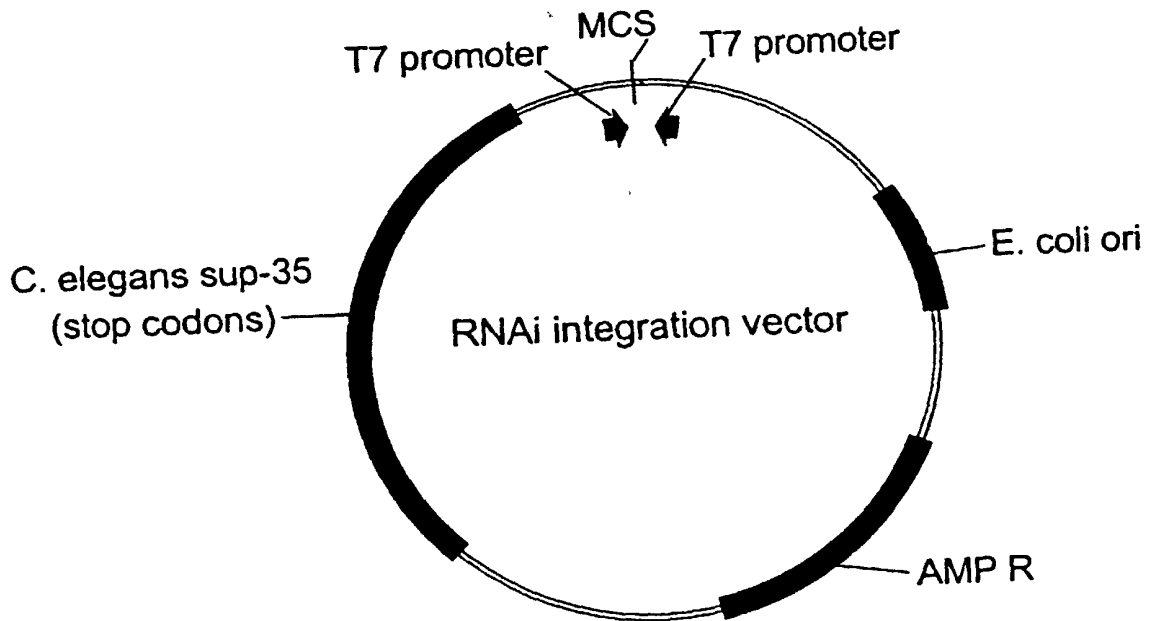
*enhanced vector for RNAi, producing  
sup35 dsRNA and dsRNA of the library,  
gene of interest or PCR product.*



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FIG. 8.





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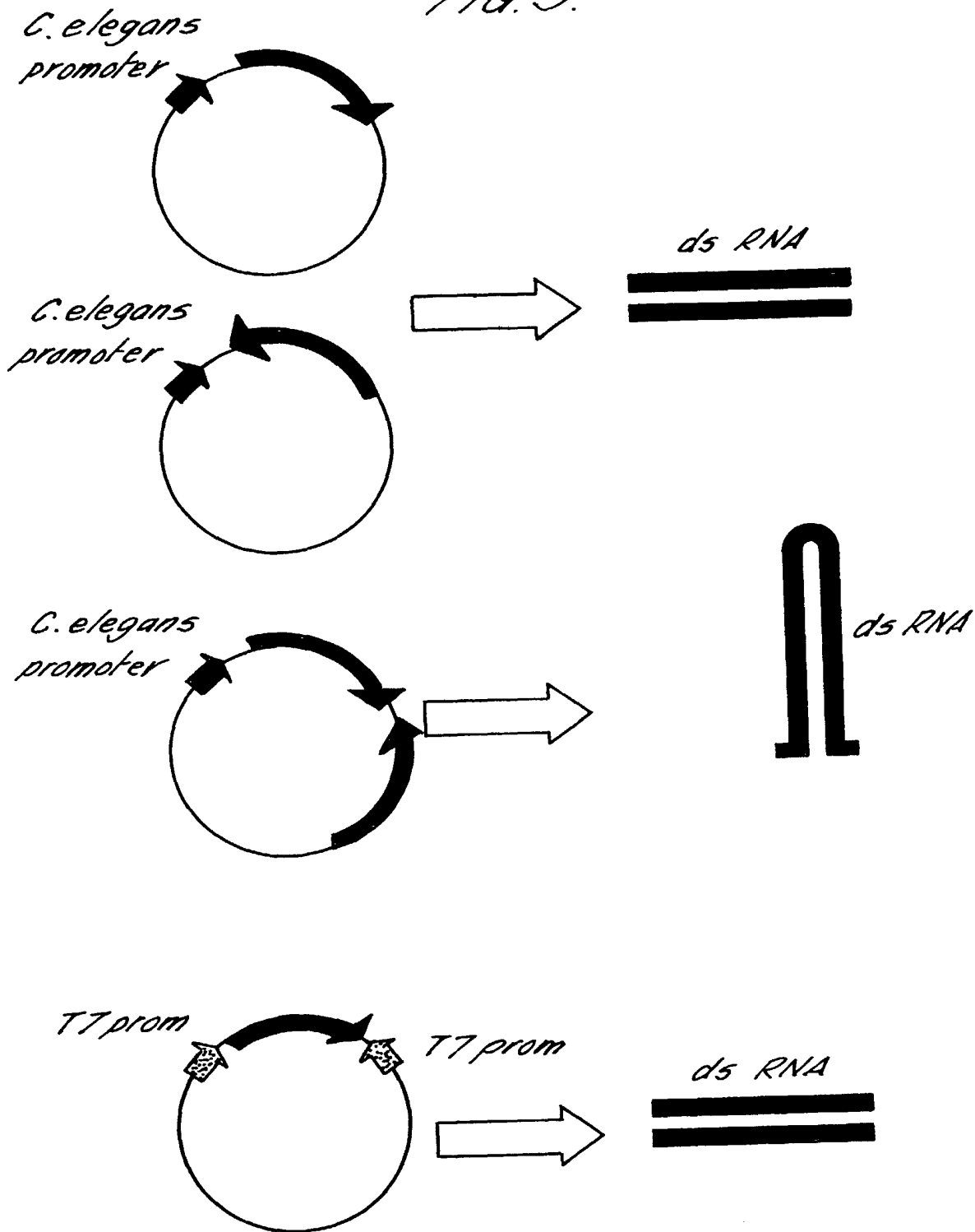
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FIG. 9.

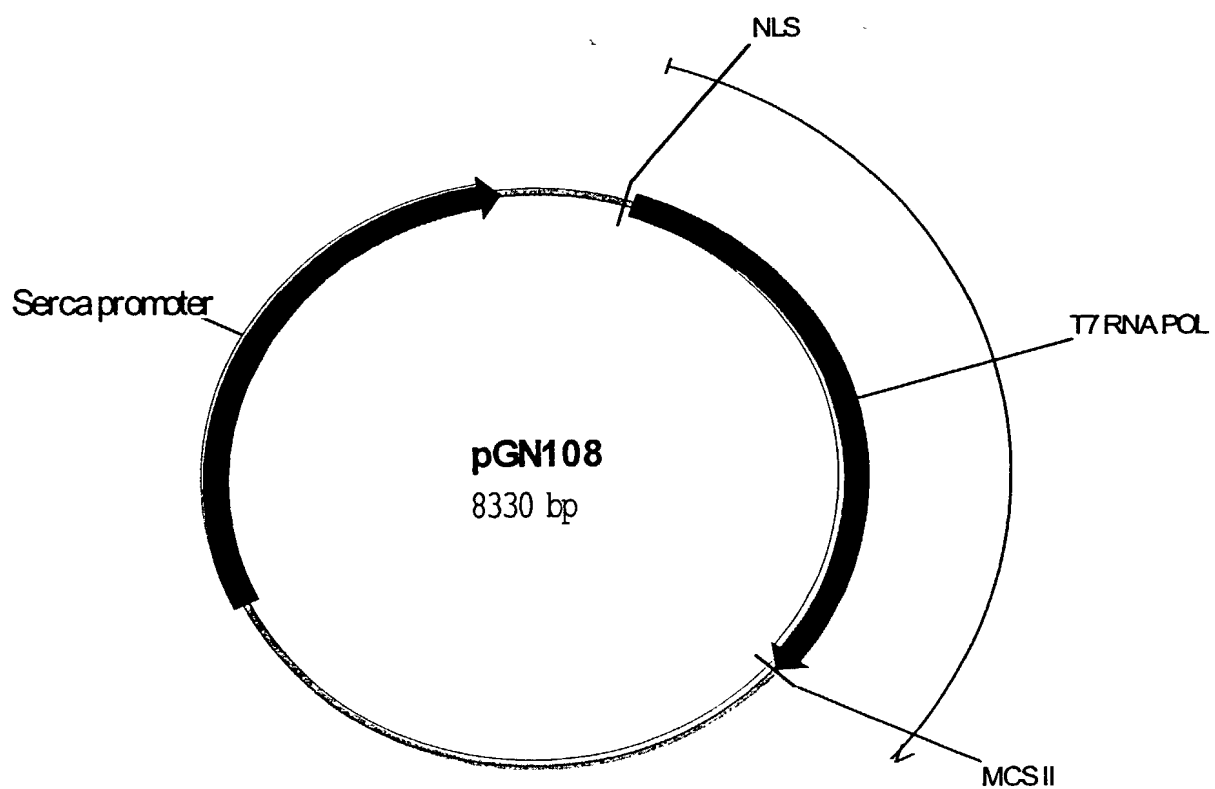




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FIG. 10.

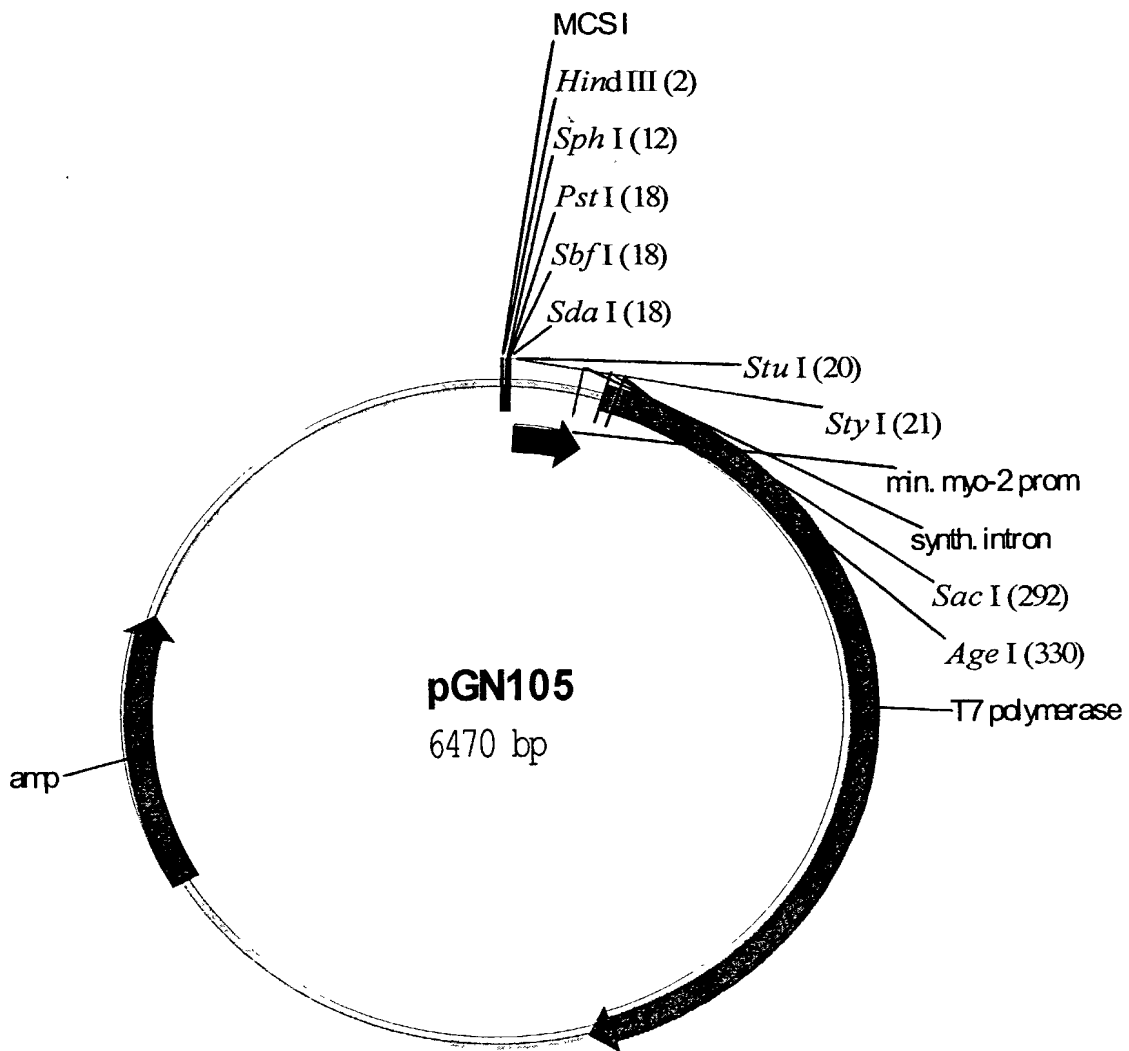




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FIG. 11.





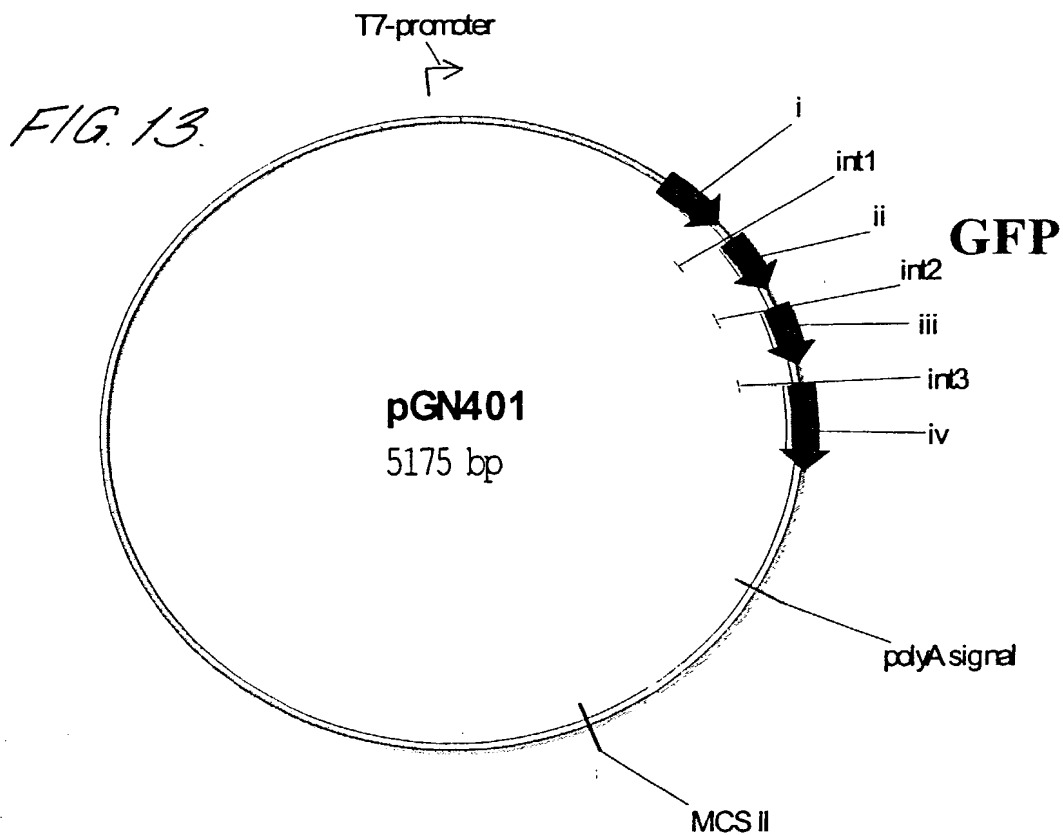
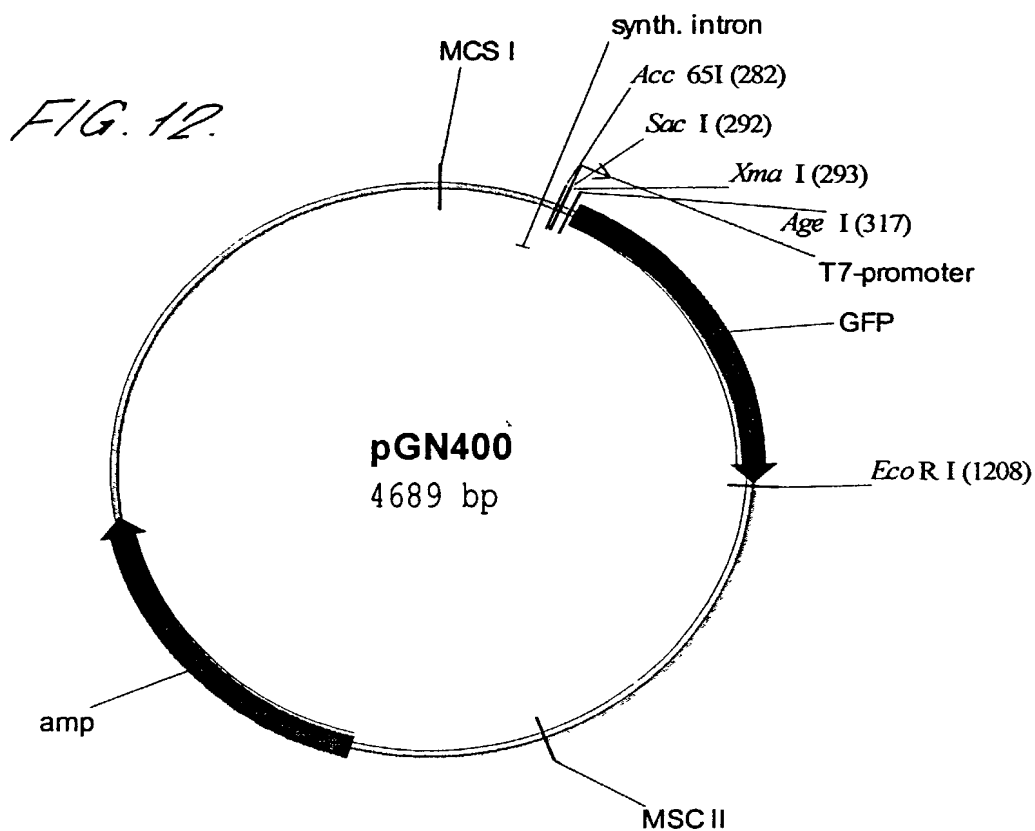
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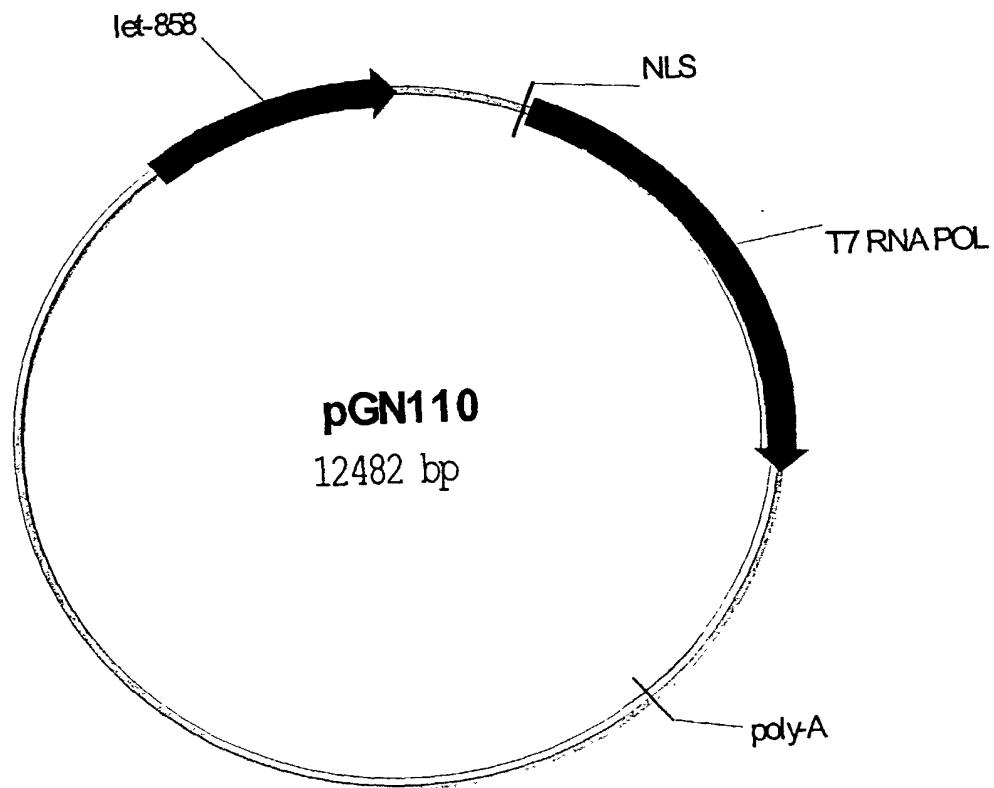




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FIG. 14.







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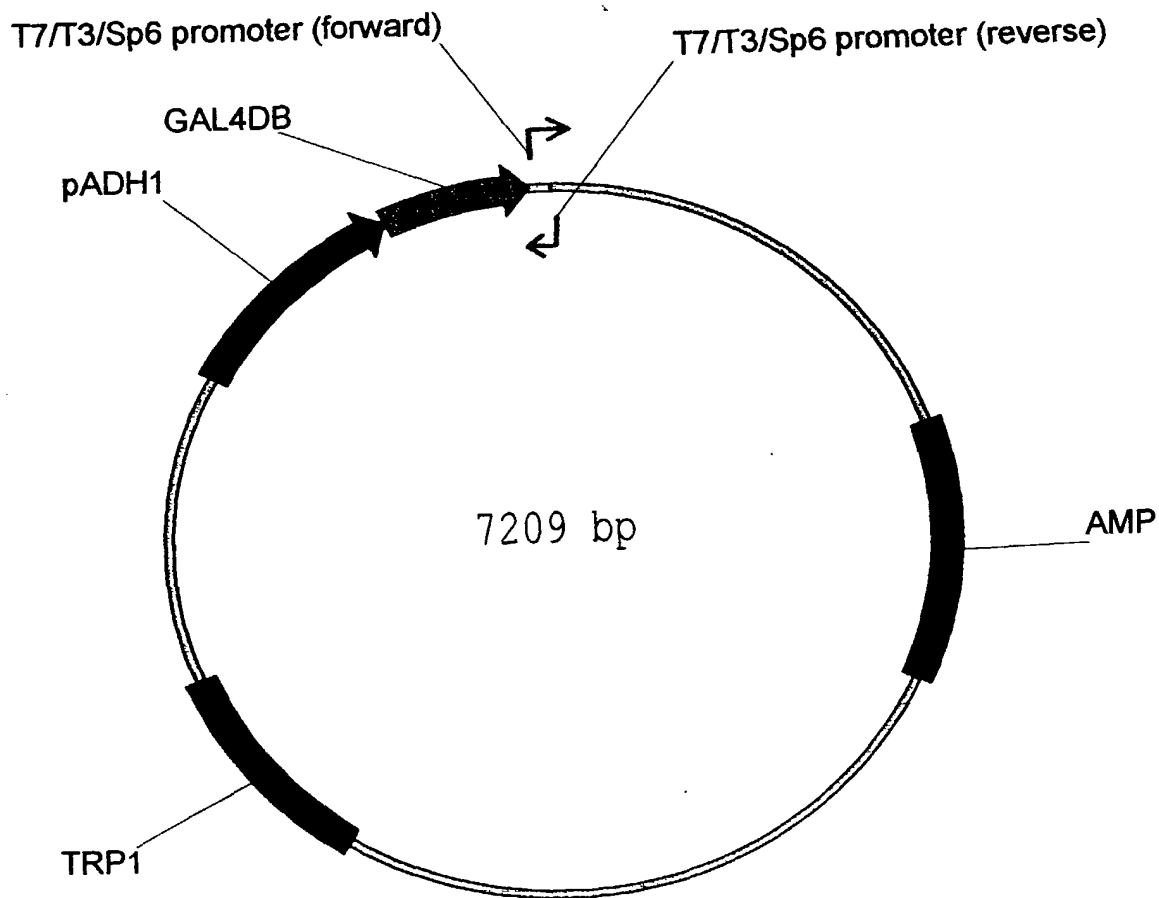
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*FIG. 15.*

**pAS2\* with Forward and Reverse T7/T3/Sp6**



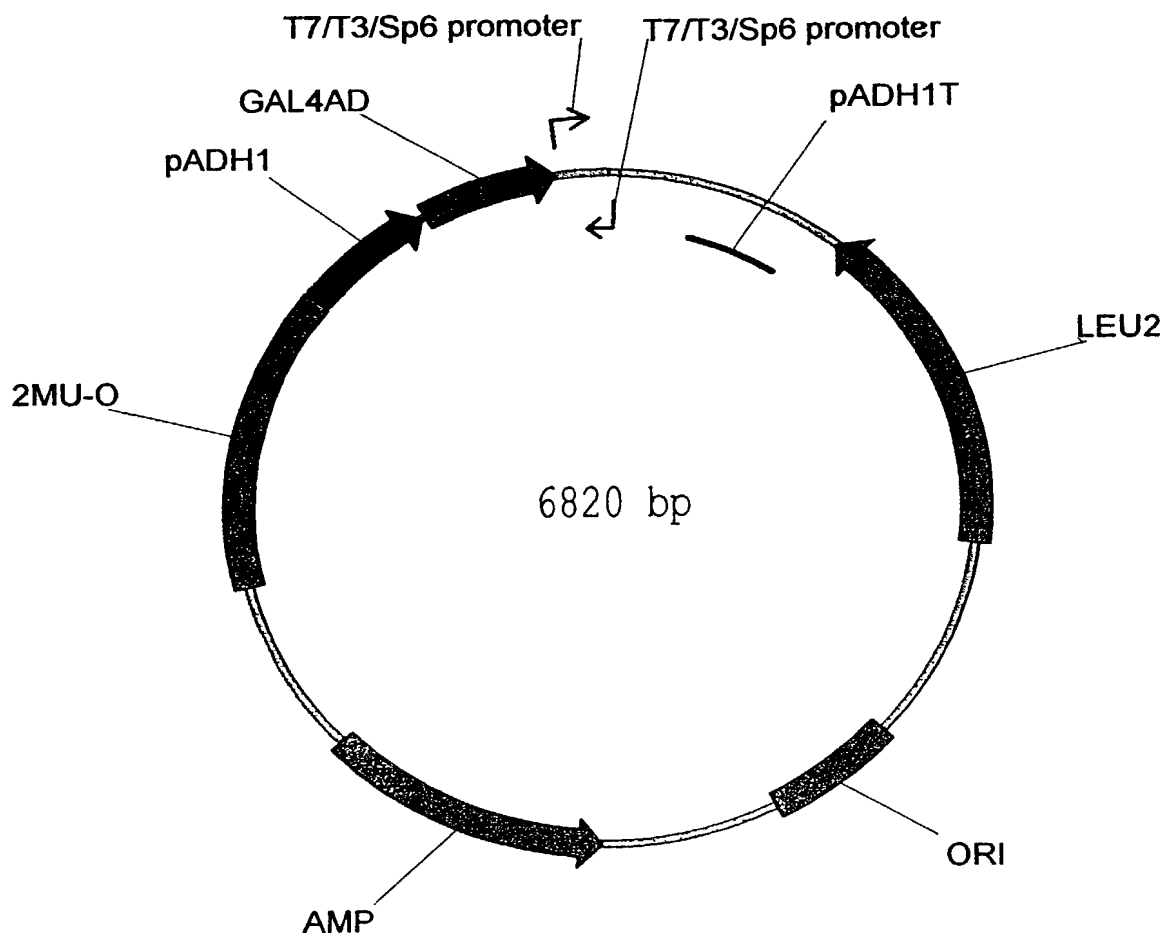


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FIG. 16.

### pGAD424 with Forward and Reverse T7/T3/Sp6

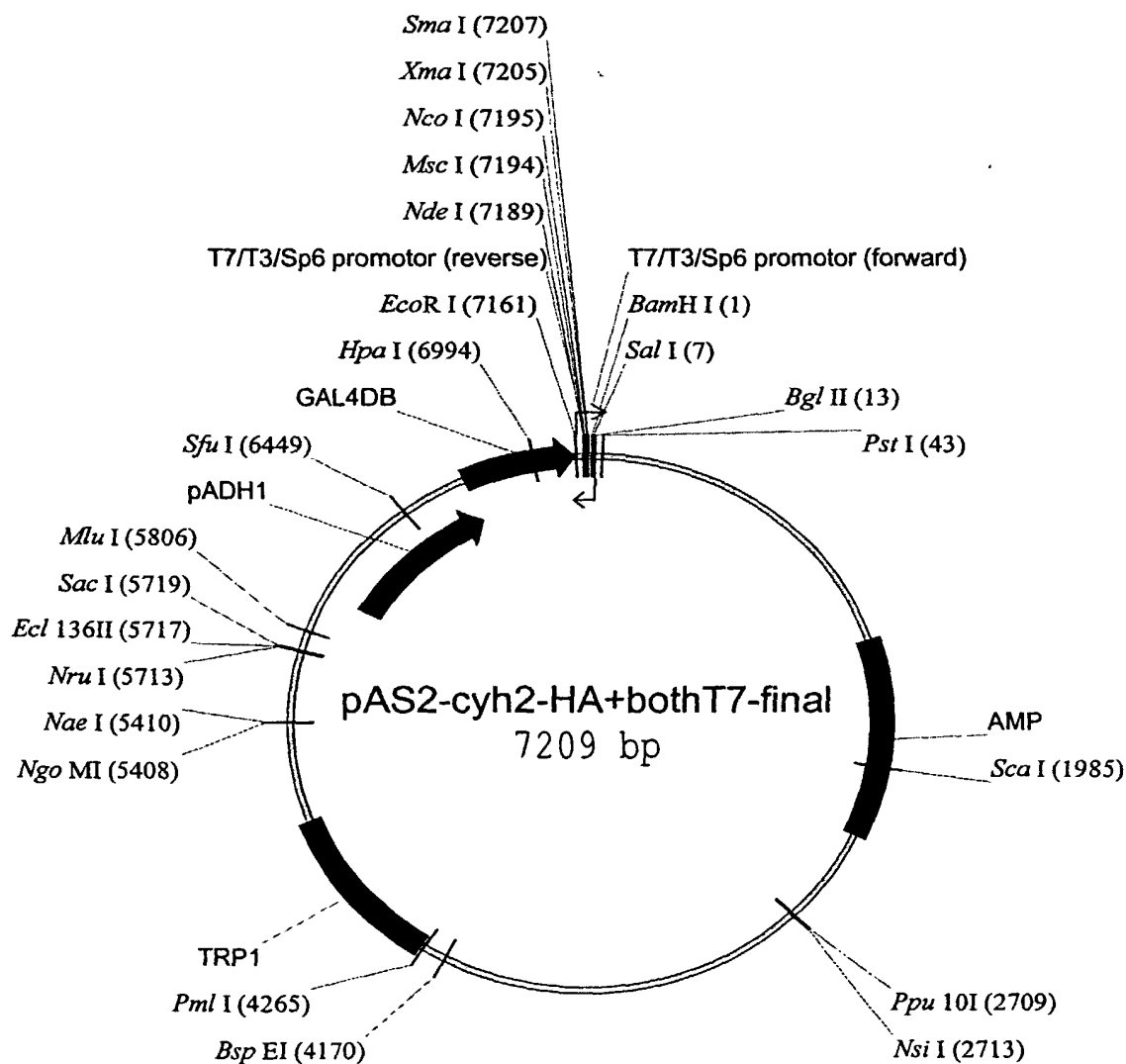




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FIG. 17.

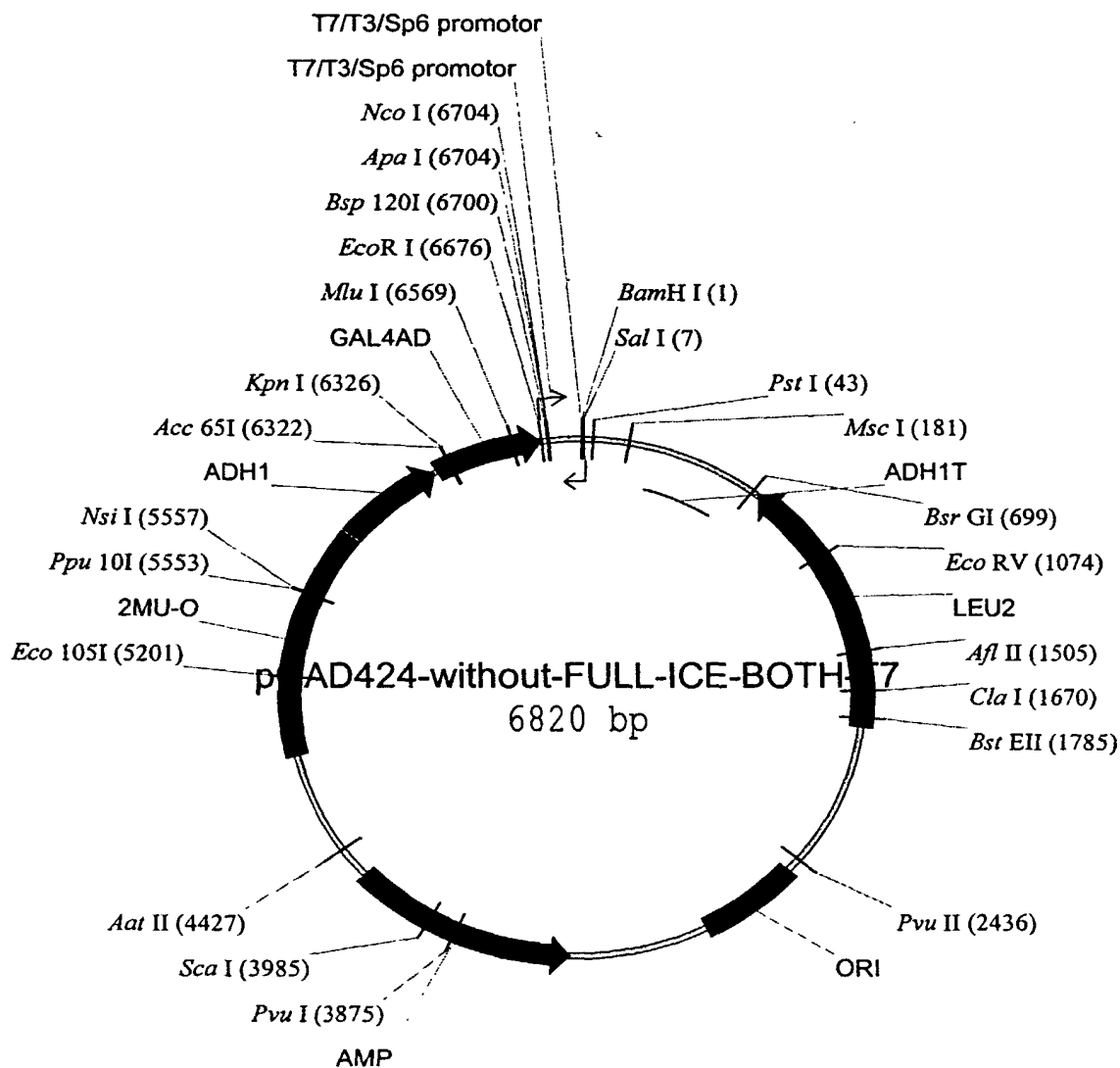




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FIG. 18.





CHARACTERISATION OF GENE  
FUNCTION USING DOUBLE STRANDED  
RNA INHIBITION

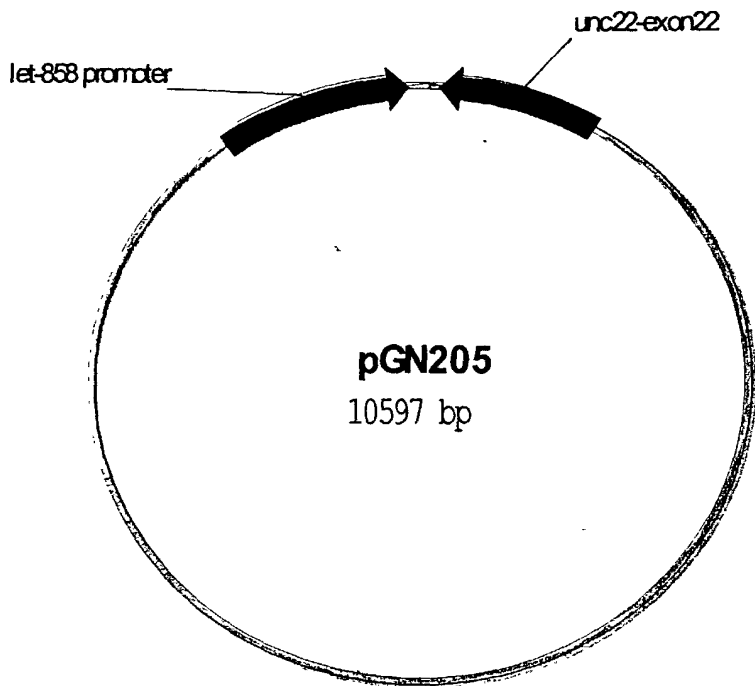
by Plactinck et al.

Serial No. 10/057,108

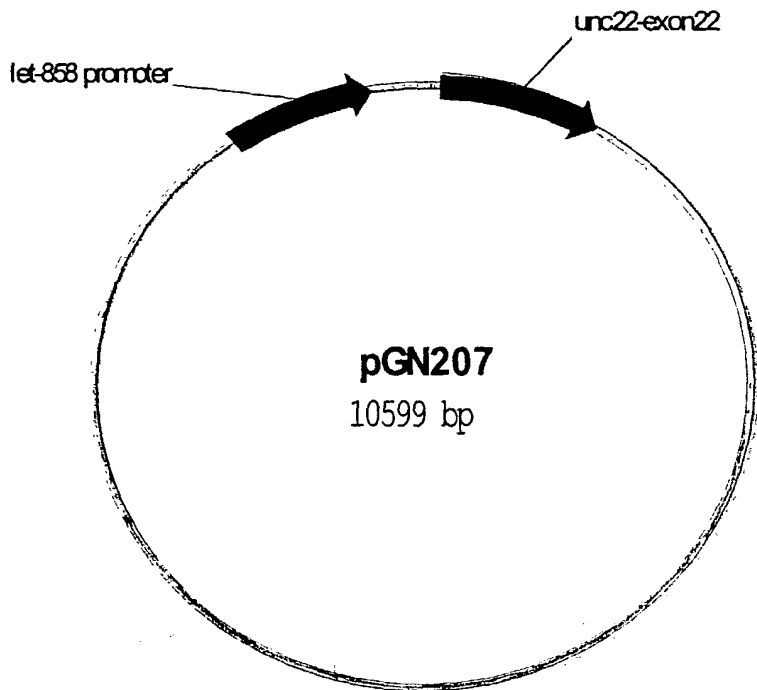
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FIG. 19.



a)



b)